

ABSTRACT

In embodiments of the invention, a vortex chamber tool in a conduit includes: an outer barrel; an inner barrel that is concentric with the outer barrel; and a corkscrew deflector coupled to an inside wall of the outer barrel and an outside wall of the inner barrel to organize the flow of a fluid in the vortex chamber tool. The vortex chamber tool operates to convert a turbulent flow from an input portion of the conduit into a non-turbulent laminar flow at a downstream portion of the conduit.